

AMENDMENTS TO THE SPECIFICATION:

Please replace the *title* at page 1, line 2 with the following revised title:

FREEZING DEVICE CONSTRUCTION REFRIGERATION APPARATUS
CONSTRUCTING METHOD, AND FREEZING DEVICE REFRIGERATION
APPARATUS

Please add the following new paragraph on page 1, between lines 2 and 3:

CROSS-REFERENCE TO RELATED APPLICATIONS

This U.S. National stage application claims priority under 35 U.S.C. §119(a) to Japanese Patent Application Nos. 2003-175928, filed in Japan on June 20, 2003, and 2003-361828, filed in Japan on October 22, 2003, the entire contents of which are hereby incorporated by reference.

Please replace the paragraph beginning at page 1, line 31, with the following rewritten version:

To solve this problem, an air conditioner has been proposed that, by connecting a gas separation apparatus filled with an adsorbent to a refrigerant circuit and circulating the refrigerant, adsorbs and eliminates from the refrigerant the noncondensable gas remaining inside the refrigerant connecting pipe after the equipment installation, piping, and wiring work. It is possible to omit the vacuum drawing work wherein a vacuum pump is used, thereby simplifying the construction of the air conditioner (e.g., refer to Patent Document 1
Japanese Publication No. H05-69571). However, with this air conditioner, a large amount of the adsorbent is needed to enable the adsorption of as much of the noncondensable gas contained in the refrigerant as possible, which consequently increases the size of the overall apparatus, and actually makes it problematic to mount on the refrigeration apparatus.

Please replace the paragraph beginning at page 2, line 7, with the following rewritten version:

In addition, an air conditioner has been proposed that: connects a jig comprising a separation membrane to the refrigerant circuit; fills the entire refrigerant circuit beforehand with a refrigerant sealed in the heat source unit; mixes the refrigerant and the noncondensable gas that remained inside the refrigerant connecting pipe after equipment installation, piping, and wiring work; subsequently supplies the separation membrane without raising the pressure of the refrigerant and the noncondensable gas mixture; and separates and eliminates the noncondensable gas. Thereby, it is possible to omit the vacuum drawing work wherein a vacuum pump is used, thereby simplifying the construction of the air conditioner (e.g., refer to Patent Document 2Japanese Publication No. H10-213363). However, with this air conditioner, the pressure differential cannot be increased between the separation membrane upstream side (i.e., inside the refrigerant circuit) and downstream side (i.e., outside the refrigerant circuit), which is a problem because of the low efficiency by which the separation membrane separates the noncondensable gas.

Please delete the heading at page 2, line 19, as follows:

<PATENT DOCUMENT 1>

Please delete the paragraph at page 2, line 20, as follows:

Published Unexamined Utility Model Application H05-69571

Please delete the heading at page 2, line 21, as follows:

<PATENT DOCUMENT 2>

Please delete the paragraph at page 2, line 22, as follows:

Japanese Published Patent Application No. H10-213363

Please replace the heading at page 2, line 23, with the following rewritten version:

DISCLOSURE BRIEF SUMMARY OF THE INVENTION

Please replace the paragraph beginning at page 2, line 30, with the following rewritten version:

A refrigeration apparatus constructing method according to the a first aspect of the present invention is a method of constructing a refrigeration apparatus, comprising: a heat source unit comprising a compressor and a heat source side heat exchanger; a utilization unit comprising a utilization side heat exchanger; and a liquid refrigerant connecting pipe that connects the heat source unit and the utilization unit; the method comprising the steps of an equipment installing step and a noncondensable gas discharging step. The equipment installing step constitutes a refrigerant circuit by installing the heat source unit and the utilization unit, and connecting the refrigerant connecting pipe. The noncondensable gas discharging step operates the compressor to circulate a refrigerant inside the refrigerant circuit, uses a membrane to separate a noncondensable gas remaining inside the refrigerant connecting pipe from the refrigerant flowing between the heat source side heat exchanger and the utilization side heat exchanger, and discharges the noncondensable gas out of the refrigerant circuit.

Please replace the paragraph beginning at page 3, line 22, with the following rewritten version:

A refrigeration apparatus constructing method according to the a second aspect of the present invention is a method of constructing a refrigeration apparatus, comprising: a heat source unit comprising a compressor and a heat source side heat exchanger; a utilization unit comprising a utilization side heat exchanger; and a liquid refrigerant connecting pipe that connects the heat source unit and the utilization unit; the method comprising the steps of a refrigerant circuit constituting step and a noncondensable gas discharging step. The

refrigerant circuit constituting step constitutes a refrigerant circuit by connecting the heat source unit and the utilization unit via the refrigerant connecting pipe. The noncondensable gas discharging step operates the compressor to circulate a refrigerant inside the refrigerant circuit, uses a separation membrane to separate a noncondensable gas remaining inside the refrigerant connecting pipe from the refrigerant flowing between the heat source side heat exchanger and the utilization side heat exchanger, and discharges the noncondensable gas out of the refrigerant circuit.

Please replace the paragraph beginning at page 4, line 15, with the following rewritten version:

A refrigeration apparatus constructing method according to the a third aspect of the present invention is a refrigeration apparatus constructing method as recited in the first or second aspect of the present invention, wherein, in the noncondensable gas discharging step, the refrigerant flowing between the heat source side heat exchanger and the utilization side heat exchanger is vapor-liquid separated into liquid refrigerant and the noncondensable gas-containing gas refrigerant, and the noncondensable gas is subsequently separated from the vapor-liquid separated gas refrigerant.

Please replace the paragraph beginning at page 4, line 26, with the following rewritten version:

A refrigeration apparatus constructing method according to the a fourth aspect of the present invention is a refrigeration apparatus constructing method as recited in the third aspect of the present invention, wherein in the noncondensable gas discharging step, the separated noncondensable gas is released into the atmosphere.

Please replace the paragraph beginning at page 4, line 33, with the following rewritten version:

A refrigeration apparatus constructing method according to the a fifth aspect of the present invention is a refrigeration apparatus constructing method as recited in any one invention of the first invention through the fourth aspects of the present invention, further comprising: a seal testing step that, before the noncondensable gas discharging step, performs a seal test on the refrigerant connecting pipe; and a sealed gas releasing step that, after the seal testing step, reduces pressure by releasing a sealed gas inside the refrigerant connecting pipe into the atmosphere.

Please replace the paragraph beginning at page 5, line 12, with the following rewritten version:

The refrigeration apparatus according to the a sixth aspect of the present invention is a refrigeration apparatus that constitutes a refrigerant circuit, wherein a heat source unit comprising a compressor and a heat source side heat exchanger, and a utilization unit comprising a utilization side heat exchanger, are connected via a refrigerant connecting pipe, comprising: a gas separation apparatus comprising a separation membrane connected to a liquid side refrigerant circuit that connects the heat source side heat exchanger and the utilization side heat exchanger, and that is capable of separating from the refrigerant and discharging out of the refrigerant circuit the noncondensable gas remaining inside the refrigerant connecting pipe by operating the compressor and circulating the refrigerant inside the refrigerant circuit.

Please replace the paragraph beginning at page 6, line 1, with the following rewritten version:

The refrigeration apparatus according to the a seventh aspect of the present invention is a refrigeration apparatus as recited in the sixth aspect of the present invention, wherein the liquid side refrigerant circuit further comprises a receiver capable of accumulating the

refrigerant flowing between the heat source side heat exchanger and the utilization side heat exchanger. The gas separation apparatus is connected to the receiver, and separates the noncondensable gas contained in the gas refrigerant accumulated in the upper part of the receiver.

Please replace the paragraph beginning at page 6, line 13, with the following rewritten version:

The refrigeration apparatus according to ~~the~~ an eighth aspect of the present invention is a refrigeration apparatus as recited in the seventh aspect of the present invention, wherein the gas separation apparatus further comprises a discharge valve for releasing the separated noncondensable gas into the atmosphere.

Please replace the heading at page 7, line 13 with the following rewritten version:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE
INVENTION

Please replace the heading at page 30, line 1, with the following rewritten version:

WHAT IS CLAIMED IS: CLAIMS